

## ABSTRACT

- A UMTS (universal mobile telecommunications system) based system comprises a common control point, a number of base stations,  $K$ , and a mobile terminal. During a soft handoff involving the  $K$  base stations and the mobile terminal, the common control point
- 5 receives individual user channel transmit powers from each of the  $K$  base stations. In addition, the common control point receives two parameters from the mobile terminal –the identity of that base station involved in the soft handoff that has the strongest received signal at the mobile terminal and, on an average, a value representing how much stronger the received SNR was in comparison to the SNR target maintained by the mobile terminal.
  - 10 The common control point then decides on a downlink reference user channel transmit power for each of the base stations as a function of the individual user channel transmit powers reported by each base station involved in the soft handoff and the information provided from the mobile terminal.